



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

C45-OH
Job Sheet OH198461



Part No: C45-OH

Job Qty: 1 pcs

Part Name: C-Series Remote Hook 4,500 lbs Lift Capacity



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 7/30/19

Job Tracking No:

Created By: Jennifer Renwick

Due Date: 9/20/19

Type: Rework - OH

Description:

Note: O&OPM-C45 REV.4 IPP REV: A 18.04.20 NEW ISSUE DD VERF: JFS/IPP Rev. B 19.05.13 drawing revision
DP Verify DD

Ship Via:

RA 754 - order 18388 - SN 45069

CANCELLED
See Attached
5225129

10-22
2019
97

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard Setup Hrs	Run Hrs	Workcenter/Supplier	Sign-off
110	External Load - Issue SN	1 pcs	9/20/19		0.00	1.00	External Load - 1	
							External Load - 2	
							External Load - 3	
115	External Load - 2 - B4B	1 pcs	9/20/19		0.00	1.00	External Load - 1 - B4B	
							External Load - 2 - B4B	
							External Load - 3 - B4B	
120	QC 5	1 pcs	9/20/19		0.00	0.00	QC 5 - 10	
							QC 5 - 12	
							QC 5 - 17	
							QC 5 - 18	
							QC 5 - 19	
							QC 5 - 22	
							QC 5 - 24	
							QC 5 - 3	
							QC 5 - 43	
							QC 5 - 49	
							QC 5 - 51	
							QC 5 - 58	
							QC 5 - 68	
							QC 5 - 9	
							QC 5 - 50	
							QC 5 - 30	
							QC 5 - 40	
							QC 5 - 61	
							QC 5 - 81	
130	Customer Acceptance	1 pcs	9/20/19		0.00	0.00		
140	Outsource - 2 - NDT per QSI038	1 pcs	9/20/19				SKY002-VC 10	
150	Packaging 2-1 - Receive - B4B	1 pcs	9/20/19		0.00	0.00	Packaging 2 - 1 - B4B	



Dart Aerospace Ltd.
1270 Aberdeen Street
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CANADA
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Container No: S201584



Part: C45

Job No: OH198461

Serial No/Batch: 45069

Revision: 4

Inspector:

Exp Date:

Instructions:

Date: 08/01/19

Plex 7/30/19 8:58 AM Dart.Renwick.Jennife

				Packaging 2 - 2 - B4B	
				Packaging 2 - 3 - B4B	
				Packaging 2 - 5 - B4B	AUG 28 2019
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	
				Packaging 2 - 14 - B4B	
				Packaging 2 - 15 - B4B	
				Packaging 2 - 16 - B4B	
				Packaging 2 - 17 - B4B	
				Packaging 2 - 18 - B4B	
				Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
160 QC 6	1 pcs	9/20/19	0.00 0.00	QC 6 - 9	
				QC 6 - 68	DAS 61 9-89
				QC 6 - 61	
				QC 6 - 40	
				QC 6 - 81	
165 External Load - 3 - B4B <i>plating inspection</i>	1 pcs	9/20/19	0.00 0.50	External Load - 1 - B4B	AP 2019/09/11
				External Load - 2 - B4B	
				External Load - 3 - B4B	
170 QC 5	1 pcs	9/20/19	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	

				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
175	Outsource - 15 - Nickel Plate	1 pcs	9/20/19	GRO002-VC	
180	Packaging 2-2 - Receive - B4B	1 pcs	9/20/19	0.00 0.00	Packaging 2 - 1 - B4B
					Packaging 2 - 2 - B4B
					Packaging 2 - 3 - B4B
					Packaging 2 - 5 - B4B
					Packaging 2 - 4 - B4B
					Packaging 2 - 6 - B4B
					Packaging 2 - 7 - B4B
					Packaging 2 - 8 - B4B
					Packaging 2 - 9 - B4B
					Packaging 2 - 10 - B4B
					Packaging 2 - 11 - B4B
					Packaging 2 - 12 - B4B
					Packaging 2 - 13 - B4B
					Packaging 2 - 14 - B4B
					Packaging 2 - 15 - B4B
					Packaging 2 - 16 - B4B
					Packaging 2 - 17 - B4B
					Packaging 2 - 18 - B4B
					Packaging 2 - 19 - B4B
					Packaging 2 - 20 - B4B
					Packaging 2 - 21 - B4B
					Packaging 2 - 22 - B4B
					Packaging 2 - 23 - B4B
					Packaging 2 - 24 - B4B
					Packaging 2 - 25 - B4B
					Packaging 2 - 26 - B4B
					Packaging 2 - 27 - B4B
					Packaging 2 - 28 - B4B
					Packaging 2 - 29 - B4B
					Packaging 2 - 30 - B4B
					Packaging 2 - 31 - B4B
					Packaging 2 - 32 - B4B
					Packaging 2 - 33 - B4B
					Packaging 2 - 34 - B4B
					Packaging 2 - 35 - B4B
					Packaging 2 - 36 - B4B
185	QC 6	1 pcs	9/20/19	0.00 0.00	QC 6 - 9
					QC 6 - 68
					QC 6 - 61
					QC 6 - 40
					QC 6 - 81
190	External Load - 4 - B4B	1 pcs	9/20/19	0.00 1.33	External Load - 1 - B4B
					External Load - 2 - B4B
					External Load - 3 - B4B
195	QC 5	1 pcs	9/20/19	0.00 0.00	QC 5 - 10
					QC 5 - 12
					QC 5 - 17
					QC 5 - 18
					QC 5 - 19
					QC 5 - 22
					QC 5 - 24
					QC 5 - 3
					QC 5 - 43

					QC 5 - 49	
					QC 5 - 51	
					QC 5 - 58	
					QC 5 - 68	
					QC 5 - 9	
					QC 5 - 50	
					QC 5 - 30	
					QC 5 - 40	
					QC 5 - 61	
					QC 5 - 81	
200	Packaging 3-1 - Stock - B4B	1 pcs	9/20/19	0.00 0.00	Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
210	DC - 1 - B4B	1 pcs	9/20/19	0.00 0.00	DC - 1 - B4B	
					DC - 2 - B4B	
220	QC 21 - FG	1 pcs	9/20/19	0.00 0.00	QC 21 - FG - 21	
					QC 21 - FG - 70	
					QC 21 - FG - 53	

Part Op 110 - Issue S/N

Descriptions: 115 - TEST ASSEMBLY. DISASSEMBLE ASSEMBLY. INSPECT DAMAGE PART.

120 - (QC5- Inspect part completeness to step on W/O)

140 - LIQUID PENETRANT INSPECTION AS PER QSI 038

150 - (Receive & Inspect for Damage & Mat'l Certs)

160 - (QC6- All purchased or subcontracted products) 1-Triage parts to be sent out for plating

165 - Prepare for nickel plate

170 - (QC5- Inspect part completeness to step on W/O)

175 - -Issue P/O; _____ -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004- .0006 -Bake after

plating -Material type; 4140 -Certificate of Conformity is required

180 - (Receive & Inspect for Damage & Mat'l Certs)

185 - (QC6- All purchased or subcontracted products)

190 - RE-ASSEMBLE. ***All assembly to be done in accordance with manual*** TEST ASSEMBLY.

195 - (QC5- Inspect part completeness to step on W/O)

200 - (Identify as per dwg & Stock Location:_____)

210 - Photocopy blue file manual and create labels

220 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
C45-AR	C-Series Remote Hook 4,500 lbs Lift Capacity	1 Ea (1 ea)	110-External Load - Issue SN	
188-FPSS-1/4-20-3/8	Set Screw	2 Ea (2 ea)	190-External Load - 4 - B4B	
188-FSCS-1032-5/8	Flat socket cap Screw	4 Ea (4 ea)	190-External Load - 4 - B4B	
600.1309-A	Label	1 pcs (1 ea)	190-External Load - 4 - B4B	
600.1312	Caution Sticker	1 pcs (1 ea)	190-External Load - 4 - B4B	
AN4-23A	Bolt	2 Ea (2 ea)	190-External Load - 4 - B4B	
AN5-21A	Bolt	4 Ea (4 ea)	190-External Load - 4 - B4B	
C2-14-2	Label Rivets	2 Ea (2 ea)	190-External Load - 4 - B4B	
C45-10-1	Lock Spring Pin	1 Ea (1 ea)	190-External Load - 4 - B4B	
C45-10-2	Lock Spring	1 pcs (1 ea)	190-External Load - 4 - B4B	
C45-11-2	Locating Pin	2 Ea (2 ea)	190-External Load - 4 - B4B	
C45-12-1	Lock Bushing	2 pcs (2 ea)	190-External Load - 4 - B4B	
C45-12-6	Retaining Ring	2 Ea (2 ea)	190-External Load - 4 - B4B	
C45-13-1	Keeper Bushing	2 pcs (2 ea)	190-External Load - 4 - B4B	
C45-13-2	Teflon Keeper, Spacer	2 Ea (2 ea)	190-External Load - 4 - B4B	
C45-13-5	Keeper Spring	1 pcs (1 ea)	190-External Load - 4 - B4B	
C45-3-1	Radial Bearing	2 Ea (2 ea)	190-External Load - 4 - B4B	
C45-3-12	Latch Roller Bearing	1 Ea (1 ea)	190-External Load - 4 - B4B	
C45-3-2-1	Snap Ring	2 Ea (2 ea)	190-External Load - 4 - B4B	
C45-3-4-1	Retaining Ring	4 Ea (4 ea)	190-External Load - 4 - B4B	
C45-3-5	Teflon Spacer	2 Ea (2 ea)	190-External Load - 4 - B4B	
C45-3-8A	Actuator Shaft Bushing	1 pcs (1 ea)	190-External Load - 4 - B4B	
C45-3-8B	Actuator Shaft Bushing	1 pcs (1 ea)	190-External Load - 4 - B4B	
C45-3-9	Lever Spring	1 pcs (1 ea)	190-External Load - 4 - B4B	
C45-4-1	Trunnion Bushing	2 pcs (2 ea)	190-External Load - 4 - B4B	
C45-5-1	Lever Stop Pin	1 Ea (1 ea)	190-External Load - 4 - B4B	
C45-7-1	LOADBEAM BUMPER	1 pcs (1 ea)	190-External Load - 4 - B4B	
C45-7-2	Lock Bumper	2 pcs (2 ea)	190-External Load - 4 - B4B	
C45-8-4	Solenoid Cover Gasket	1 pcs (1 ea)	190-External Load - 4 - B4B	
MS21044N5	Nut	4 Ea (4 ea)	190-External Load - 4 - B4B	
MS27039-4-08	Screw	1 Ea (1 ea)	190-External Load - 4 - B4B	
NAS1149F0463P	Washer (AN960-416)	3 Ea (3 ea)	190-External Load - 4 - B4B	
NAS1149F0563P	Washer (AN960-516)	8 Ea (8 ea)	190-External Load - 4 - B4B	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-External Load - Issue SN	C45	1	1	0
190-External Load - 4 - B4B	188-FPSS-1/4-20-3/8	2	139	0
	188-FSCS-1032-5/8	4	164	0
	600.1309-A	1	72	0
	600.1312	1	9	0
	AN4-23A	2	637	0
	AN5-21A	4	282	0
	C2-14-2	2	118	0
	C45-10-1	1	154	0
	C45-10-2	1	20	0
	C45-11-2	2	42	0
	C45-12-1	2	40	0
	C45-12-6	2	98	0
	C45-13-1	2	44	0
	C45-13-2	2	40	0
	C45-13-5	1	93	0
	C45-3-1	2	99	0
	C45-3-12	1	66	0
	C45-3-2-1	2	73	0
	C45-3-4-1	4	79	0
	C45-3-5	2	83	0
	C45-3-8A	1	11	0
	C45-3-8B	1	27	0
	C45-3-9	1	115	0
	C45-4-1	2	31	0
	C45-5-1	1	30	0
	C45-7-1	1	18	0
	C45-7-2	2	48	0
	C45-8-4	1	43	0
	MS21044N5	4	205	0
	MS27039-4-08	1	203	0
	NAS1149F0463P	3	610	0
	NAS1149F0563P	8	322	0

Part Specifications

Specifications could not be found.

Plex 7/30/19 8:58 AM Dart.Renwick.Jennifer

Inspection Sheet Complete RA754

Part Number	Original Batch / Serial # / Cntl #	Original Revision #	Quantity	Part Complete	Rev/CHG Current	New Paperwork	New Labels	Disposition	Original Container #	New (Receiving) Serial #	New Job #	Work order instructions
C45			1	☐ Yes	☐ Yes	☐ Yes	☐ Yes	CUSTOMER SUPPLIED		S201502	OH199461	Overhaul
C60	AC10010		0	☐ Yes	☐ Yes	☐ Yes	☐ Yes			S201502	OH199460	
0			0	☐ Yes	☐ Yes	☐ Yes	☐ Yes					
0			0	☐ Yes	☐ Yes	☐ Yes	☐ Yes					
0			0	☐ Yes	☐ Yes	☐ Yes	☐ Yes					

QC Approval: _____ 0

Date: 0-Jan-00 _____

Special Return/Rework Instructions:



Remote Cargo Hook Test Form

C45

Pre test

Work Order

OH 198461

Customer

RA 754 / order 18388

Serial Number

45069

Date

2019-7-31

# of Releases	Load (Lbs.)	Release Method	Remarks	Result	Pass/fail
1	11,250	Static Hold	Hold for two Minutes and reduce load to zero	N/A	Pass
10	2,250	Electircal, 25 volts	No "hang ups" permitted	N/A	Pass
2	4,500	Electircal, 22 volts	Current shall not exceed 12.4A	A	Fail
2	3,500	Electircal, 22 volts	Current shall not exceed 12.4A	A	
2	2,500	Electircal, 22 volts	Current shall not exceed 12.4A	A	
2	1,500	Electircal, 22 volts	Current shall not exceed 12.4A	A	
2	500	Electircal, 22 volts	Current shall not exceed 12.4A	A	
1	4,500	Electircal, 20 volts	Current shall not exceed 11.3A	A	
1	4,500	Electircal, 28 volts	Current shall not exceed 15.8A	A	
1	4,500	Manual		N/A	
1	4,500	Impact Test	Impact shackle 10 times, shall not release	N/A	
1	N/A	Solenoid Ohms	Shall not exceed 1.7-2.0 Ohms	Ohms	
1	N/A	Electircal Continuity	Across both wires	N/A	

Test Conducted By:

Michel Lalonde

Technician

Signature:

QC 5 Small FAB / QA

Submit



Overhaul Incoming Inspection
C45 Cargo Hook

Customer OH 198461

Date 2019/08/26

Part Number C45

Serial Number 45069

Additional Recommended Replacement Parts

Part Number to Replace

Customer Approval

(2) x C45-3-4 LINK PIN	☐
(1) x C45-3-2 LATCH PIN	☐
(1) x C45-8-2 SELENOID	☐
(1) x C45-8-5 SEL. COVER	☐
(1) x C10-41 STRAIN RELIEF CONNECTOR	☐
(1) x AN12H32 BOLT	☐
(1) x C45-15-7 WASHER	☐
(1) x C45-15-9 (MS24665-363) COTTER PIN	☐
(2) x MS21044 D8 1/2 NUT	☐
(2) x AN8-23A 1/2" BOLT	☐

Inspected By A. PATRY

Work Order 198461Customer RA754 / ORDER 18388Serial Number 45069Date 2019/08/26**MAGNAFLUX**

Part Number	Description	Quantity	
C45-4-4	Load Beam	1	
C45-13-3	Keeper Shaft	1	
C45-3-7	Link	1	
C45-3-4	Link Pins	0	
C45-3-6	Latch	1	
C45-3-3	Latch Roller	1	
C45-3-2	Latch Roller Pin	0	
C45-3-10	Latch Shaft	1	
C45-12-3	Lock	1	
C45-12-2	Lock Shaft	1	
C45-12-4	Lock Roller	1	
C45-12-5	Lock Roller Pin	1	

C45-3-11ACTUATOR**ZYGLO**

Part Number	Description	Quantity	Pass/Fail
C45-2-1	Side Plate	1	
C45-11-1	Side Plate Solenoid	1	

TOTAL : 13 Pcs

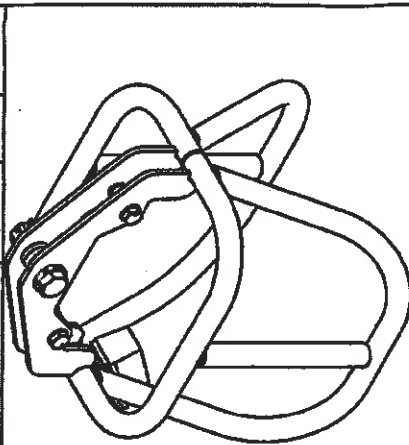
Test Conducted By:

Signature: _____

A. PATRY

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
3		AS DRAWN BY APICAL	11/6/2012	JAG
4	15-0180	UPDATED TO NEW DRAFTING STANDARDS. CHD P/N WAS C45-15-8 IS AN960-816. C45-15-4 DELETED. REPLACED WITH AN8-23A. C45-15-5 DELETED. REPLACED WITH MS21044N8. C45-15-7 ADDED TO BOM QTY 4.	7/22/2015	DPD
E	19-660	Replaces B/O info for C45-15-2, C45-15-3 and C45-15-9. C45-15-12	04/12/2019	ML



ASSY QTY	ASSY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS
			C45-19C	1	WELDMENT		
			C45-15-2	1	LIFTING BOLT	STEEL	AN12H32
		B/O	C45-15-3	1	CASTLE NUT	STEEL	AN310-12
		B/O	C45-15-7	2	LIFTING BOLT WASHER	STEEL	3/4 (MCMaster-CARR #98023AD34)
		B/O	C45-15-9	1	COTTER PIN	S.S	MS24665-363
			C45-15-10	1	FORD BUMPER		(#837Z-4730-A) MODIFIED
		B/O	C45-15-11	1	CAGE BUMPER NUT	STEEL	M10, CLASS 8 (MCMaster-CARR #90576A118)
		B/O	C45-15-12	1	CAGE BUMPER WASHER	STEEL	NAS1149C0663R
		B/O	C45-15-6	1	LIFTING BUSHING	4140/4142	
		B/O	C45-15-7	1	BUSHING	STEEL	.025 X Ø.511 I.D. (MCMaster-CARR #3088A412)
		B/O	AN8-23A	2	BOLT	STEEL	1/2-20 X 1.47
		B/O	AN960-816	1	LIFTING BOLT WASHER	STEEL	AN960-816 (NAS1149F0863P)
		B/O	MS21044N8	2	NUT	STEEL	1/2-20

DART
AEROSPACE

C45 CAGE

DWG NO.	C45-C
DATE	4/12/2019
SCALE	1:8
REV	E
DRAWN BY:	APICAL
APPROVED:	ML
TEST:	TEST
FINISH:	FINISH
SPEC:	SPEC
USED ON MODEL:	
1. BREAK ALL SHARP EDGES .010 x 48"	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	

SHEET 1 OF 1



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **POHB044348**



Supplier: SKY002-VC
Skyservice
6120 Midfield Road
Mississauga
ON
L5P 1B1 Canada
Phone: 905-678-5636
Fax: 905-678-5841

Attention: Jenne, Heather

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB044348
PO Date: 8/26/19
Due Date: 8/30/19
Purchase Order Revision:
Revision Date:
Ship-To Contact: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

E-MAILED
2019-08-27

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	OH198460	C60-OH	C-Series Remote Hook 6,000 lbs Lift Capacity LIQUID PENETRANT INSPECTION AS PER QSI 038	Firmed	-	8/30/19 AUG 28 2019	1 pcs	0 pcs	1 pcs	\$178.00/pcs	\$178.00
Line Item Note: 1 kit = 9 pcs ✓											
2	OH198461	C45-OH	C-Series Remote Hook 4,500 lbs Lift Capacity LIQUID PENETRANT INSPECTION AS PER QSI 038	Firmed	-	8/30/19 AUG 28 2019	1 pcs	0 pcs	1 pcs	\$178.00/pcs	\$178.00
Line Item Note: 1 kit = 13 pcs ✓											
Grand Total:										\$356.00	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044348



Order Notes

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A022 Apical Processing

A024 process certifications

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 8/26/19 3:21 PM Dart.Guerin.Kimberley

**skyservice****Work Order Traveler**

Sky Service F.B.O. Inc.

10105 Ryan Avenue, Dorval, Quebec, H9P 1A2

TCCA AMO 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO41539	Customer: Dart Aerospace Ltd.	Dept: NDT YUL	Reference: POHB044348 ✓
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	
Task: UNSCHEDULED			Sequence: 1

Work Required:

CARRY OUT NDT ON :

(1) C-SERIES REMOTE HOOK (9 PCS), P/N# C60-OH ✓ J/S# OH198460 ✓

(1) C-SERIES REMOTE HOOK (13 PCS) P/N# C45-OH ✓ J/S# OH198461 ✓

DAS
61
9-89

Action Taken:						Date:	Initial/Stamp:
LPI & MPI C/O IAW QSI 038 AND ASTM E-1417M-16 , ASTM E-1444M-16 ***NO CRACK FOUND*** PEN , ZL-37 MPO#: 23206 CLEANER SKC-S MPO15030, EMU.(ZR-10B, MPO23451), DEV. MPO15030, UV LIGHT M-20142 MAGBENCH S/N 208123 CAL DUE: 25-SEP-2019 POWDER 14A BATCH# MPO13600 CARRIER II BATCH# MPO22794 BLACK LIGHT-M20186						AUG 27 2019	DOT-APP 310 53-89 313
Description	Location	P/N	Qty	Batch	S/N Off	S/N On	

RECEIVED

AUG 27 2019

DART AEROSPACE LTD.

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature:	ACA/SCA Stamp DOT-APP 310 53-89	Date: AUG 27 2019
Name: RICARDO VARGAS		

Work Order

198461

Customer

RA 754 / ORDER 18388

Serial Number

45069

Date

2019/08/26**MAGNAFLUX**

Part Number	Description	Quantity	
C45-4-4	Load Beam	1	
C45-13-3	Keeper Shaft	1	
C45-3-7	Link	1	
C45-3-4	Link Pins	0	
C45-3-6	Latch	1	
C45-3-3	Latch Roller	1	
C45-3-2	Latch Roller Pin	0	
C45-3-10	Latch Shaft	1	
C45-12-3	Lock	1	
C45-12-2	Lock Shaft	1	
C45-12-4	Lock Roller	1	
C45-12-5	Lock Roller Pin	1	

C45-3-11ACTUATORZYGLODAS
61
9-89

Part Number	Description	Quantity	Pass/Fail
C45-2-1	Side Plate	1	
C45-11-1	Side Plate Solenoid	1	

TOTAL : 13 PCS

Test Conducted By:

Signature: _____

A. PATRY



NICKEL PLATING

MODEL: C45

S/N : 45069

Job : OH198461

ORDER : 18388

P/N	DESCRIPTION	QUANTITY
C45-4-4A	LOAD BEAM	1
C45-13-4	KEEPER	1
C45-12-3	LOCK	1
C45-12-2	LOCK SHAFT	1
C45-3-3	LATCH ROLLER	1
C45-12-5	LOCK ROLLER PIN	1
C45-13-3	KEEPER SHAFT	1
	TOTAL	7



DATE: 2019/09/10

NICKEL PLATING

MODEL: C45

S/N : 45069

JOB : 0H198461

ORDER : 18388

P/N	DESCRIPTION	QUANTITY
C45-4-4A	LOAD BEAM	1
C45-13-4	KEEPER	1
C45-12-3	LOCK	1
C45-12-2	LOCK SHAFT	1
C45-3-3	LATCH ROLLER	1
C45-12-5	LOCK ROLLER PIN	1
C45-13-3	KEEPER SHAFT	1
TOTAL		7

C 45-0H

Job OH 198461

[Dart Hawkesbury] Job Sheet - Renwick, Jennifer

plating -Material type; 4140 -Certificate of Conformity is required

180 - (Receive & Inspect for Damage & Mat'l Certs)

185 - (QC6- All purchased or subcontracted products)

190 - RE-ASSEMBLE. ***All assembly to be done in accordance with manual*** TEST ASSEMBLY.

195 - (QC5- Inspect part completeness to step on W/O)

200 - (Identify as per dwg & Stock Location: _____)

210 - Photocopy blue file manual and create labels

220 - (QC21- Final Inspection - Work Order Release)

S/N 45069

RA754

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
C45-AR	C-Series Remote Hook 4,500 lbs Lift Capacity	1 Ea (1 ea)	110-External Load - Issue SN	
188-FPSS-1/4-20-3/8	Set Screw	2 Ea (2 ea)	190-External Load - 4 - B4B	
188-FSCS-1032-5/8	Flat socket cap Screw	4 Ea (4 ea)	190-External Load - 4 - B4B	
600.1309-A	Label	1 pcs (1 ea)	190-External Load - 4 - B4B	
600.1312	Caution Sticker	1 pcs (1 ea)	190-External Load - 4 - B4B	
AN4-23A	Bolt	2 Ea (2 ea)	190-External Load - 4 - B4B	
AN5-21A	Bolt	4 Ea (4 ea)	190-External Load - 4 - B4B	
C2-14-2	Label Rivets	2 Ea (2 ea)	190-External Load - 4 - B4B	
C45-10-1	Lock Spring Pin	1 Ea (1 ea)	190-External Load - 4 - B4B	
C45-10-2	Lock Spring	1 pcs (1 ea)	190-External Load - 4 - B4B	
C45-11-2	Locating Pin	2 Ea (2 ea)	190-External Load - 4 - B4B	
C45-12-1	Lock Bushing	2 pcs (2 ea)	190-External Load - 4 - B4B	
C45-12-6	Retaining Ring	2 Ea (2 ea)	190-External Load - 4 - B4B	
C45-13-1	Keeper Bushing	2 pcs (2 ea)	190-External Load - 4 - B4B	
C45-13-2	Teflon Keeper, Spacer	2 Ea (2 ea)	190-External Load - 4 - B4B	
C45-13-5	Keeper Spring	1 pcs (1 ea)	190-External Load - 4 - B4B	
C45-3-1	Radial Bearing	2 Ea (2 ea)	190-External Load - 4 - B4B	
C45-3-12	Latch Roller Bearing	1 Ea (1 ea)	190-External Load - 4 - B4B	
C45-3-2-1	Snap Ring	2 Ea (2 ea)	190-External Load - 4 - B4B	
C45-3-4-1	Retaining Ring	4 Ea (4 ea)	190-External Load - 4 - B4B	
C45-3-5	Teflon Spacer	2 Ea (2 ea)	190-External Load - 4 - B4B	
C45-3-8A	Actuator Shaft Bushing	1 pcs (1 ea)	190-External Load - 4 - B4B	
C45-3-8B	Actuator Shaft Bushing	1 pcs (1 ea)	190-External Load - 4 - B4B	
C45-3-9	Lever Spring	1 pcs (1 ea)	190-External Load - 4 - B4B	
C45-4-1	Trunnion Bushing	2 pcs (2 ea)	190-External Load - 4 - B4B	
C45-5-1	Lever Stop Pin	1 Ea (1 ea)	190-External Load - 4 - B4B	
C45-7-1	LOADBEAM BUMPER	1 pcs (1 ea)	190-External Load - 4 - B4B	
C45-7-2	Lock Bumper	2 pcs (2 ea)	190-External Load - 4 - B4B	
C45-8-4	Solenoid Cover Gasket	1 pcs (1 ea)	190-External Load - 4 - B4B	
MS21044N5	Nut	4 Ea (4 ea)	190-External Load - 4 - B4B	
MS27039-4-08	Screw	1 Ea (1 ea)	190-External Load - 4 - B4B	
NAS1149F0463P	Washer (AN960-416)	3 Ea (3 ea)	190-External Load - 4 - B4B	
NAS1149F0563P	Washer (AN960-516)	8 Ea (8 ea)	190-External Load - 4 - B4B	



Overhaul Incoming Inspection
C45 Cargo Hook

Customer OH 198461

Date 2019/08/20

Part Number C45

Serial Number 45069

Additional Recommended Replacement Parts

Part Number to Replace

Customer Approval

(2) X C45-3-4 LINK PIN	☐
(1) X C45-3-2 LATCH PIN	☐
(1) X C45-8-2 SELENOID	☐
(1) X C45-8-5 SEL. COVER	☐
(1) X C10-41 STRAIN RELIEF CONNECTOR	☐
(1) X AN12H32 BOLT	☐
(1) X C45-15-7 WASHER	☐
(1) X C45-15-9 (MS24665-363) COTTER PIN	☐
(2) X MS21044 D8 1/2 NUT	☐
(2) X AN8-23A 1/2" BOLT	☐

Inspected By A. PATRY



Overhaul Incoming Inspection
C45 Cargo Hook

Customer OH 198461

Date 2019/08/26

Part Number C45

Serial Number 45069

Order 183881 RA754

Additional Recommended Replacement Parts

Part Number to Replace

Customer Approval

- | | |
|--|--------------------------|
| (2) X <u>C45-3-4 LINK PIN</u> | ☐ |
| (1) X <u>C45-3-2 LATCH PIN</u> | ☐ |
| (1) X <u>C45-8-2 SELENOID</u> | ☐ |
| (1) X <u>C45-8-5 SEL. COVER</u> | ☐ |
| (1) X <u>C10-41 STRAIN RELIEF CONNECTOR</u> | ☐ |
| (1) X <u>AN12H32 BOLT</u> | ☐ |
| (1) X <u>C45-15-7 WASHER</u> | ☐ |
| (1) X <u>C45-15-9 (MS24665-363) COTTER PIN</u> | ☐ |
| (2) X <u>MS21044 D8 1/2 NUT</u> | ☐ |
| (2) X <u>AN8-23A 1/2" BOLT</u> | ☐ |

Inspected By A. PATRY



Overhaul Incoming Inspection
C45 Cargo Hook

Customer

RA 754 / order 18388

Date

2019-08-01

Part Number

C45 OH

Serial Number

45069

Additional Recommended Replacement Parts

Part Number to Replace

Customer Approval

(2X) C45-3-4 Link Pin ☐

(1X) C45-3-2 Catch pin ☐

(1X) C45-8-2 solenoid ☐

(1X) CAGE HARDWARE (AS PER DRAWING ATTACHED) ☒

(1X) C45-8-5 solenoid cover ☐

(1X) C10-41 strain relief ☐

connector ☐

Inspected By

Michael Lelonde

Jennifer Renwick

From: Jennifer Renwick
Sent: Wednesday, August 07, 2019 11:54 AM
To: Lacey Cantin
Subject: RE: RA Unknown from HeliQWest

Sorry Caitlin, I didn't see that note. Please see below:

C45-15-9 (x1)
C45-18-7 (x4)
AN8-23A (x2)
AN960-816 (x4)
MS21044N8 (x2)

Thank you,
Jen

From: Lacey Cantin <lcantin@dartaero.com>
Sent: Wednesday, August 07, 2019 10:36 AM
To: Jennifer Renwick <jrenwick@dartaero.com>
Subject: RE: RA Unknown from HeliQWest

Hi Jen,

For this one attached where it says cage hardware, can I get PN's so I can quote the customer?

Thanks,
Lacey

From: Jennifer Renwick <jrenwick@dartaero.com>
Sent: Wednesday, August 07, 2019 8:29 AM
To: Caitlin Crooks <ccrooks@dartaero.com>
Subject: RE: RA Unknown from HeliQWest

Hi Caitlin,

Please see the attached sheet for extra parts needed for:

Order 18388 Job OH198461 part# C45-OH / RA754 / SN 45069
Order 18388 Job OH198460 part# C60-OH / RA754 / SN AC10010

Thank you,
Jen

From: Jennifer Renwick
Sent: Tuesday, July 30, 2019 8:53 AM
To: Caitlin Crooks <ccrooks@dartaero.com>

Jennifer Renwick

From: Chantal Chartrand
Sent: Tuesday, October 22, 2019 9:01 AM
To: Lacey Cantin; Jennifer Renwick; Ashley Beecraft
Subject: RE: DART Hook Overhauls for HeliQwest, PO BJC-2413

Updated and dated for tomorrow

From: Lacey Cantin <lcantin@dartaero.com>
Sent: October 22, 2019 8:41 AM
To: Jennifer Renwick <jrenwick@dartaero.com>; Chantal Chartrand <cchartrand@dartaero.com>
Subject: FW: DART Hook Overhauls for HeliQwest, PO BJC-2413

Hi Jen and Chantal,

Finally got a response on order 18388. They will not be overhauling. Can you kindly arrange to have this returned AS IS to the customer, and change the fee to \$250? We can use the same shipping information on their PO: FEDEX P2 ACCT#250388918

Please let me know if you need anything further.

Lacey

From: Francisco Garcia [<mailto:francisco@heliqwest.com>]
Sent: October 21, 2019 5:08 PM
To: Lacey Cantin <lcantin@dartaero.com>
Subject: RE: DART Hook Overhauls for HeliQwest, PO BJC-2413

Lacey,

My sincerest apologies on the delayed response. We will not be overhauling the C45 hook. Please return as is. Is the inspection fee still \$ 250 USD?

Best regards,
Francisco "Cisco" Garcia
Purchaser

Stores & Logistics

 **HELIQWEST**

HeliQwest Aviation

HeliQwest International, Inc.

(o) 303-469-2932 ext. 117

(c) 303-408-7587

From: Lacey Cantin [<mailto:lcantin@dartaero.com>]
Sent: Monday, September 30, 2019 6:54 AM

To: Lacey Cantin <lcantin@dartaero.com>

Subject: RE: DART Hook Overhauls for HeliQwest, PO BJC-2413

Lacey,

I apologize on the delay on a response. I have forwarded this to my DOM for approval. I am currently waiting for approval as well. I will get back to you as soon as I can.

Thank you for the follow up,
Francisco "Cisco" Garcia
Parts & Logistics

HQ HELIQWEST
HeliQwest International, Inc.
11915 Airport Way #6
Broomfield, CO 80021
(o) 303-469-2932
(c) 303-408-7587

From: Lacey Cantin [<mailto:lcantin@dartaero.com>]

Sent: Thursday, August 22, 2019 2:15 PM

To: Francisco Garcia

Subject: RE: DART Hook Overhauls for HeliQwest, PO BJC-2413

Hi Francisco,

I just wanted to follow up on this as I haven't heard back. Can you kindly advise?

Kindest Regards,

LACEY CANTIN

Inside Sales Representative

DART AEROSPACE

T 1 514 907-5959 > 247

1 800 556- 4166

www.dartaerospace.com

For *technical support*, click [here](#).

To access *technical documentation*, create your account [here](#).



From: Lacey Cantin

Sent: August 20, 2019 2:57 PM

C45-18-7 (x4) \$5.00 ea, ext. price \$20.00
AN8-23A (x2) \$22.00 ea, ext. price \$44.00
AN960-816 (x4) \$4.00 ea, ext. price \$16.00
MS21044N8 (x2) \$3.00 ea, ext. price \$6.00

Just for your records, the price of a new C45 is \$2615.00, and the price of a new C60 is \$3,040.00. For reference, your C45 overhaul cost with replacement parts would be at \$3,260.00, and your C60 overhaul cost with replacement parts would be at \$2,423.00. Your overhaul will be stopped until we receive word back on how you'd like to proceed.

Kindest Regards,

LACEY CANTIN
Inside Sales Representative

DART AEROSPACE
T 1 514 907-5959 > 247
1 800 556- 4166
www.dartaerospace.com

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